

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
25 August 2005 (25.08.2005)

PCT

(10) International Publication Number
WO 2005/077967 A1

(51) International Patent Classification⁷: C07H 21/04, C07B 59/00, C07D 495/04, 475/04, A61K 51/06, 51/04, G01T 1/161

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:
PCT/CA2005/000195

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(22) International Filing Date: 14 February 2005 (14.02.2005)

Published:

(25) Filing Language: English

— *with international search report*

(26) Publication Language: English

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(30) Priority Data:
60/544,163 13 February 2004 (13.02.2004) US

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(54) Title: RADIOLABELED COMPOUNDS AND COMPOSITIONS, THEIR PRECURSORS AND METHODS FOR THEIR PRODUCTION

(57) Abstract: Positron emitting compounds and methods of their production are provided. The compounds have the formula: (F)_m G (R)_n wherein each R is a group comprising at least one carbon, nitrogen, phosphorus or sulfur atom and G is joined to R through said carbon, nitrogen, phosphorus or sulfur atom; G is silicon or boron; m is 2 to 5 and n is 1 to 3 with m + n = 3 to 6 when G is silicon; m is 1 to 3 and n is 1 to 3 with m + n = 3 to 4 when G is boron; and wherein the compound further comprises one or more counterions when the above formula is charged; and wherein at least one F is ¹⁸F.

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